

High Mountain Dams in Upalco Unit,

Island Lake Dam

Ashley National Forest

4.8 miles north of Miners Gulch Campground

~~Hanna~~ Vicinity MOUNTAIN HOME VICINITY

Duchesne County

Utah

HAER No. UT-42-I

HAER
UTAH,
7-MOHON,
I-I-

PHOTOGRAPHS

WRITTEN HISTORIC AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
U.S. Department of the Interior
P.O. Box 25287
Denver, Colorado 80537

HISTORIC AMERICAN ENGINEERING RECORD

HAER
UTAH,
7-MOHO. V,
1-I-

High Mountain Dams in Upalco Unit, Island Lake Dam

HAER No. UT-42-I

Location: 4.8 miles north of Miners Gulch Campground, Ashley National Forest
Mountain Home vicinity, Duchesne County, Utah

UTM: 12.533640.4494340
Quad: Kidney Lake

Date of Construction: 1920

Builder/Designer: Farnsworth Canal and Reservoir Company

Present Owner: Moon Lake Water Users Association, Roosevelt, Utah 84066

Original Use: Dam

Present Use: Dam

Significance: Island Lake is one of three high mountain lakes in the Brown Duck Basin
dammed by the Farnsworth Canal and Reservoir Company in 1920. The
dam itself is representative and relatively well-preserved, but the replacement
of the outlet mechanism has compromised its historical integrity.

Inventoried by: Clayton Fraser and James Jurale
Fraserdesign
Loveland, Colorado

October 19, 1985

HISTORICAL INFORMATION

The Farnsworth Canal and Reservoir Company filed for irrigation water storage rights on three high mountain lakes--Island, Kidney and Brown Duck--in the Lake Fork River drainage in July 1915. The permits were approved by the State Engineer the following April and, by November 1920, small-scale earth-fill dams had been completed at all three lakes to raise and control the water levels. Damming Island Lake changed its character significantly. Originally two smaller natural lakes located on a tributary of the Lake Fork River, these were joined into a single reservoir with an island near the center by the higher water. The dam featured typical earth-fill construction, with sloped, riprap-covered faces and an inclined steel gate over a 40-inch corrugated steel outlet pipe. The outlet works were replaced in 1977 with the current inclined steel outlet pipe and screw. It is proposed that the dam be breached to lower the lake to within two feet of its natural level.

ARCHITECTURAL INFORMATION

Dam length: 250 feet
Dam height: 20 feet
Dam width: 18 feet
Construct: Earth fill dam with stone riprap facing
Lake size: 60.7 acres; 757 acre-foot maximum capacity; 14 vertical foot maximum drawdown
Outlet: Gated steel pipe

BIOGRAPHICAL INFORMATION

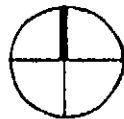
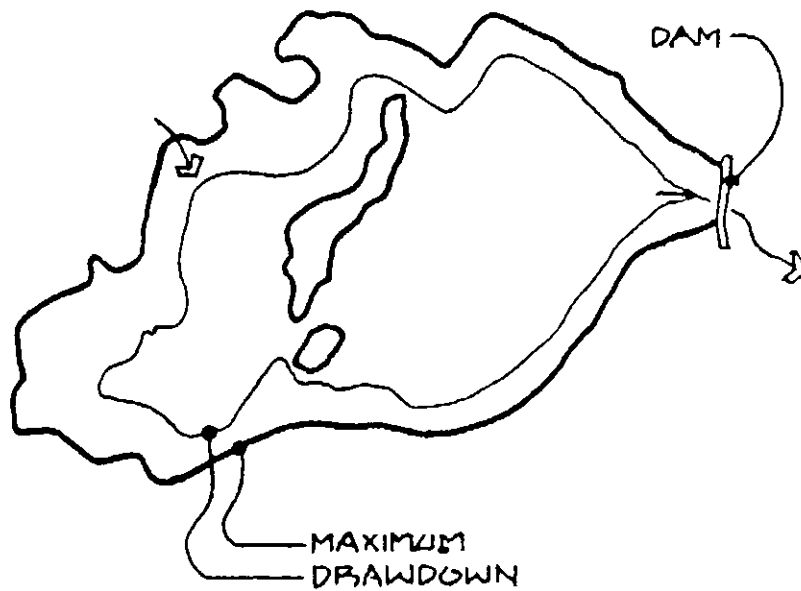
"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Upalco Unit, National Forest Service Report, 1970, page 15.

William F. Gettleman, "Report on the Lakes and Reservoir of the Headwaters of the Uintah, Whiterocks and Lakefork Rivers, Uintah Project, Utah; Feb. 1932," page. 20.

Field inspection by Clayton Fraser, July 22, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.

High Mountain Dams in Upalco Unit,
Island Lake Dam
HAER No. UT-42-1
(Page 3)



SCALE: 1" = 600'